

REMARKS

The specification has been amended to correct a minor clerical error. No new matter has been entered.

Claim 1 has been amended as suggested by the Examiner. Claim 1 also has been amended to better define the claimed invention and better distinguish the claimed invention from the prior art.

New claims 23-43 have been added to further scope the invention. Claim 23 essentially corresponds to claim 3 which the Examiner indicated to be allowable, rewritten in independent form. New dependent claims 24-43 are based on original claims 2 and 4-22, and depend directly or indirectly on new claim 23.

It is noted the Examiner has limited examination to species A and claims 1-3. Applicant submits that all of the claims assert features common to claim 1, and therefore should all be examined in a single application. Notwithstanding, so as to be fully responsive Applicant confirms his provisional election of species A, and requests that the non-elected claims 4-22 be maintained in the Application without further action, for possible rejoinder and/or for filing of a divisional application.

Turning to the rejection of claims 1 and 2 as anticipated by Nogawa, Nogawa fails to teach or disclose the non-inverting and inverting input terminals each have a variable terminal voltage. Nogawa does not show two inputs in the voltage-controlled oscillator, although the circuit diagrams and description suggest the inputs for the voltage-controlled oscillator therein are not unlike those disclosed in FIG. 10, FIG. 11, and FIG. 12 of the present application. In those figures, the voltage-controlled oscillator had one non-inverting input terminal connected to a loop filter and a second input terminal connected to ground. The terminal voltage input for

HAYES SOLOWAY P.C.
3450 E. SUNRISE DRIVE
SUITE 140
TUCSON, AZ 85718
TEL. 520.882.7623
FAX. 520.882.7643

175 CANAL STREET
MANCHESTER, NH 03101
TEL. 603.668.1400
FAX. 603.668.8567

the second input terminal is invariably zero. The present application differs in that the voltage-controlled oscillator connects both the non-inverting and inverting input terminals to the charge pump through loop filters, allowing the terminal voltages of either or both input terminals to be varied. The variability of the terminal voltages is further disclosed, for instance, at page 29 of the original disclosure. Nogawa fails to teach or disclose the non-inverting and inverting input terminals each have a variable terminal voltage.

As Nogawa fails to teach or disclose every claimed element of the invention, the Applicant respectfully requests withdrawal of the anticipation rejection of claims 1 and 2.

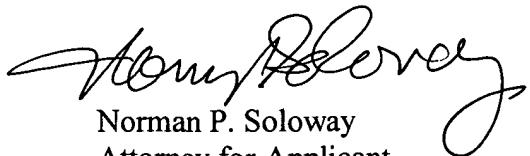
The remaining claims 4-43 are allowable for the same reasons above addressed relative to claims 1 and 2, as well as for their own additional limitations.

Having dealt with all the objections raised by the Examiner, the application is believed to be in order for allowance. Early and favorable action is respectfully requested.

Form PTO-2038 in the amount of \$1,250.00 for 21 additional claims (including one independent claim) accompanies this Amendment.

In the event there are any fee deficiencies or additional fees are payable, please charge them (or credit any overpayment) to our Deposit Account Number 08-1391.

Respectfully submitted,



Norman P. Soloway
Attorney for Applicant
Reg. No. 24,315

HAYES SOLOWAY P.C.
3450 E. SUNRISE DRIVE
SUITE 140
TUCSON, AZ 85718
TEL. 520.882.7623
FAX. 520.882.7643

175 CANAL STREET
MANCHESTER, NH 03101
TEL. 603.668.1400
FAX. 603.668.8567



Serial No. 09/712,104
Docket No. NEC 177
Amendment B

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: MAIL STOP AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on May 30, 2006, at Tucson, Arizona.

By Kim Hood

NPS:kg/kmg/cg

HAYES SOLOWAY P.C.
3450 E. SUNRISE DRIVE
SUITE 140
TUCSON, AZ 85718
TEL. 520.882.7623
FAX. 520.882.7643

175 CANAL STREET
MANCHESTER, NH 03101
TEL. 603.668.1400
FAX. 603.668.8567